

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Daggett et al.		
(PARENT) Serial No.:	08/935,105	Case No.:SD9383DDA	Art Unit: 1646
Filed: Parent	Concurrently Herewith September 29, 1997		Examiner: Unknown Examiner (Parent): J. Ulm
For:	HUMAN N-METHYL-D-ASPARTATE RECEPTOR SUBUNITS, NUCLEIC ACIDS ENCODING SAME AND USES THEREFOR		

The Honorable Assistant Commissioner for Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

This preliminary amendment accompanies a request under 37 CFR § 1.53(b) to file a Divisional application based on Serial No. 09/935,105, filed September 29, 1997, which is a Divisional of 08/231,193, filed April 20, 1994. Prior to examination of the application and claims, please amend the application as follows:

**IN THE APPLICATION**

Please cancel Chen Wang Liaw and Steven B. Ellis as inventors pursuant to 37 C.F.R. § 1.48(b).

**EXPRESS MAIL CERTIFICATE**  
DATE OF DEPOSIT January 4, 2002  
EXPRESS MAIL NO. 952390688205 EF18060768745  
I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS  
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FOR PATENTS, WASHINGTON, D.C. 20231  
MAILED BY S. Crowley  
DATE 1-4-02

## IN THE CLAIMS

Please cancel claims 1-36 and insert in place thereof the following new claims:

37. An isolated and substantially pure receptor encoded by a DNA sequence, comprising a sequence of nucleotides that encode an human N-methyl-D-aspartate receptor subtype, wherein said sequence of nucleotides is set forth in SEQ ID NO. 55.
38. A substantially pure human N-methyl-D-aspartate receptor subtype comprising the sequence of amino acids as set forth in SEQ ID NO: 56.
39. The receptor according to claim 37, where the receptor is an human N-methyl-D-aspartate receptor type 2D subunit (NMDAR2D).
40. A method for detecting a binding partner for the receptor of claim 37 in a sample suspected of containing the binding partner, comprising:
  - (i) contacting the sample with the receptor under conditions favoring binding of the receptor to the binding partner;
  - (ii) determining presence of the binding partner in the sample by detecting binding of the receptor to the binding partner.
41. A method of identifying a polypeptide which is active in a signal transduction pathway of a cell of which the receptor of claim 37 is a component, said method comprising:
  - (a) contacting a cell extract suspected of containing the polypeptide with an antibody that specifically binds to the polypeptide under conditions favoring formation of an antibody/polypeptide complex,
  - (b) identifying the antibody/polypeptide complex, and
  - (c) assaying the complex obtained in (b) to identify any polypeptide bound to the polypeptide other than the antibody.

42. A method for screening for the presence of a neurological disorder, comprising assaying a tissue from a subject to determine level of expression of the receptor according to claim 37, wherein increased or reduced level of the receptor compared to a normal level is an indication that the subject is at risk of developing the neurological disorder.
43. A method for following progress of a therapeutic regimen designed to alleviate a condition characterized by abnormal expression of the receptor of claim 37, comprising:
- (a) assaying a sample from a subject to determine level of a parameter selected from the group consisting of (i) a receptor encoded by the nucleotide sequence of SEQ. ID. NO. 55 and (ii) a receptor having the amino acid sequence as set forth in SEQ. ID. NO. 56, at a first time point;
  - (b) assaying level of the parameter selected in (a) at a second time point and
  - (c) comparing the level at the second time point to the level determined in (a) as a determination of effect of the therapeutic regimen.
44. A host cell transformed with a nucleic acid molecule that encodes the polypeptide of claim 37.
45. An antibody that is specifically binds to the polypeptide of claims 37.

#### **STATUS OF CLAIMS:**

Claims 1-36 were pending.

New claims 37-45 are added herein.

Claims 37 - 45 are presented for consideration.

**REMARKS**

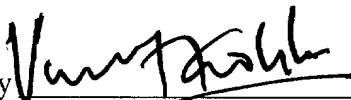
By this amendment, Applicants have canceled original claims 1-36 and inserted in place thereof new claims 37-45. The new claims are designed to conform to a Restriction requirement set forth in the parent application Serial No. 08/231,193 and in application Serial No. 09/648,797, which is a Divisional Application of the parent application. Hence no new matter is added.

It is believed that the instant claims contain patentable subject matter and a notice to that effect is earnestly solicited.

Any fees that may be due in connection with the filing of this paper of application may be charged to Deposit Account No. 13-2755.

If the Examiner believes that a telephone conference would be of value, he is requested to call the undersigned counsel at the number listed below.

Respectfully submitted,

By   
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